

Fig.1

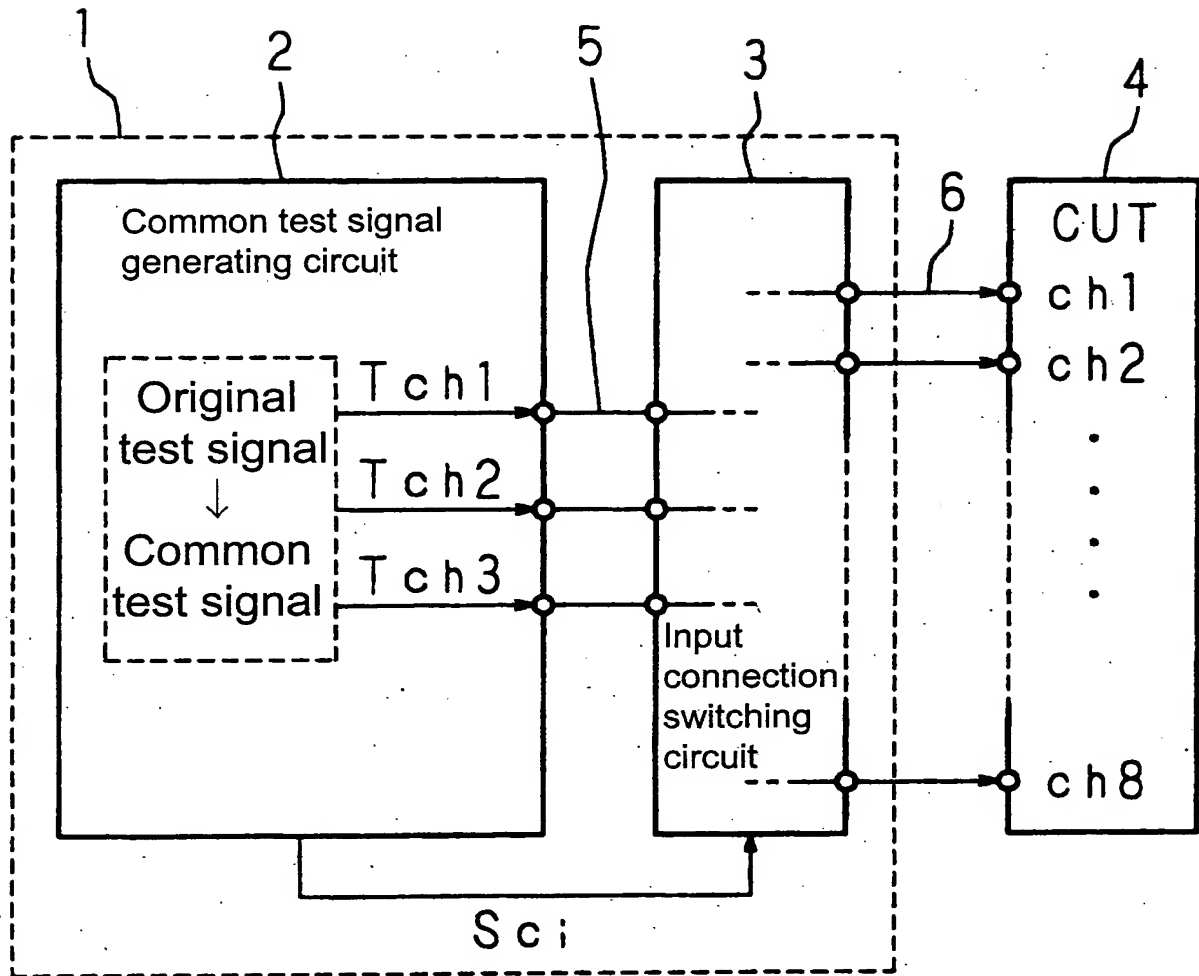


Fig.2

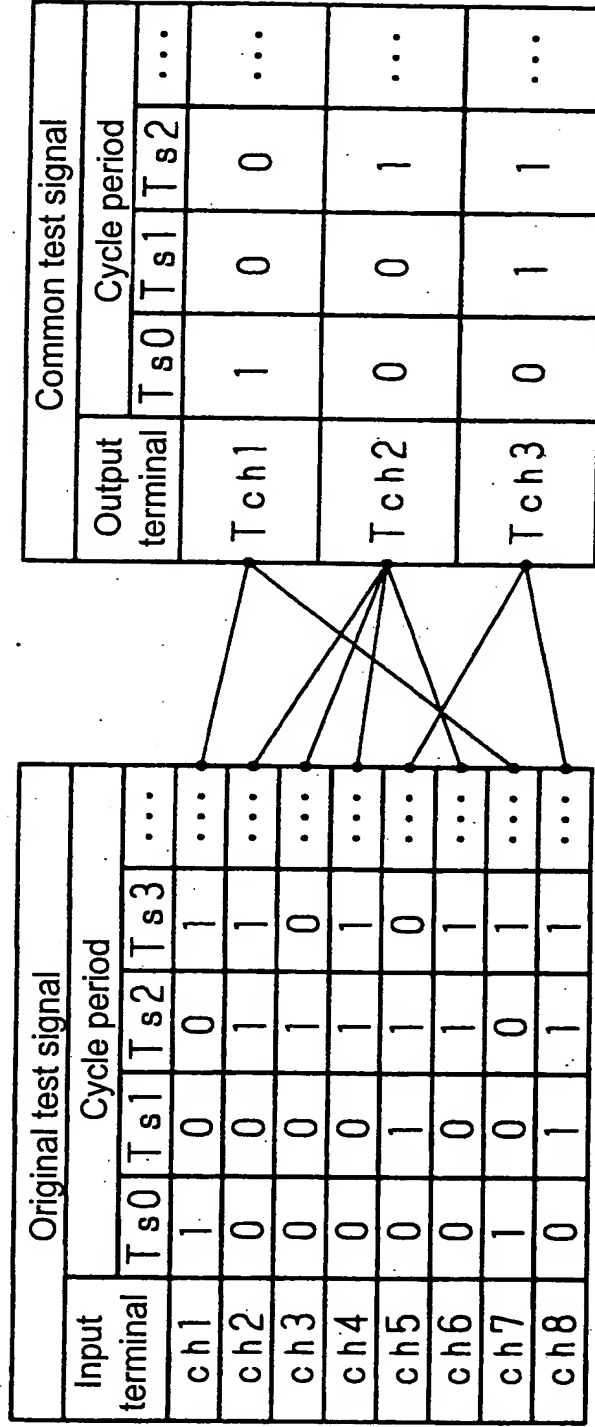


Fig.3

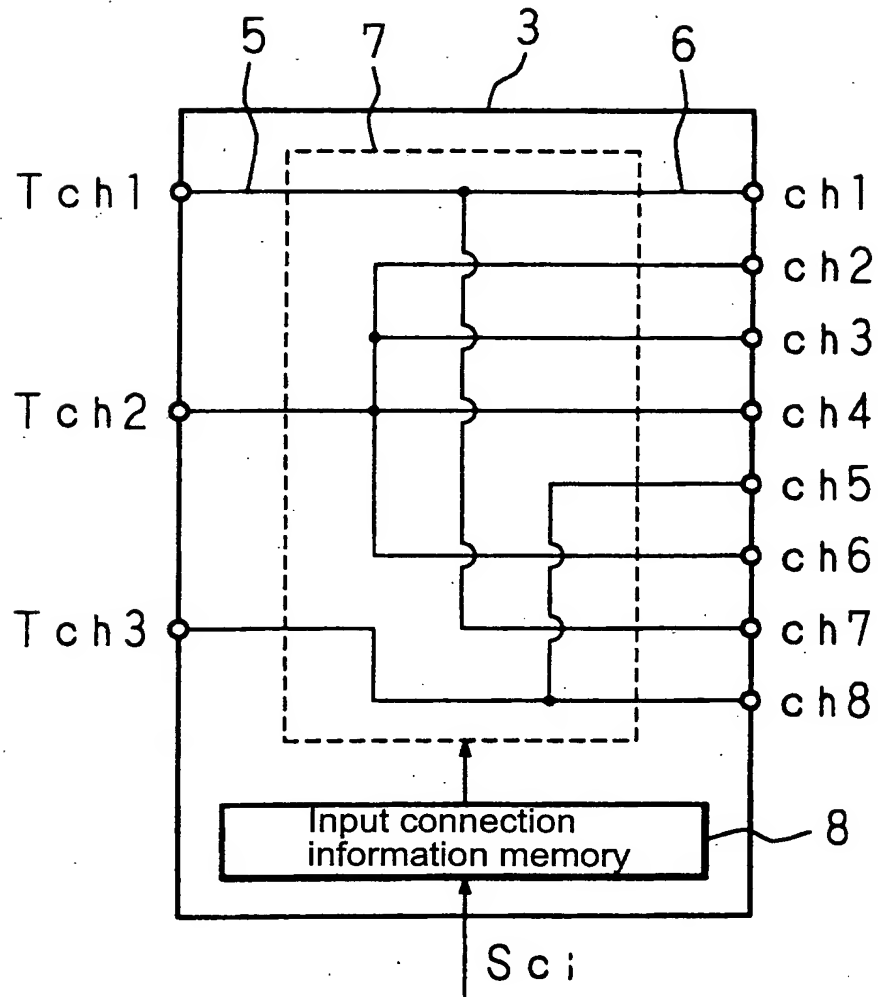


Fig.4

Cycle	Grouping state (n: Group number, N: Common target terminal number=3)					n
Ts0	Gr1		Gr0			2
	ch1,7		ch2,3,4,5,6,8			
Ts1	Gr10	Gr11	Gr00		Gr01	3
	ch1,7	ϕ	ch2,3,4,6		ch5,8	
Ts2	Gr100	Gr101	Gr001	Gr000	Gr011	3
	ch1,7	ϕ	ch2,3,4,6		ch5,8	
Ts3	Gr1001	Gr1000	Gr0011	Gr0110	Gr0111	5
	ch1,7	ϕ	ch2,4,6		ch8	

ϕ : Null set

Grouping information provided in cycle period Ts2 immediately before cycle period Ts3 in which group number n exceeds common target terminal number N=3.

Gr100 (ch1, ch7) for Tch1

Gr001 (ch2, ch3, ch4, ch6) for Tch2

Gr011 (ch5, ch8) for Tch3

Fig.5

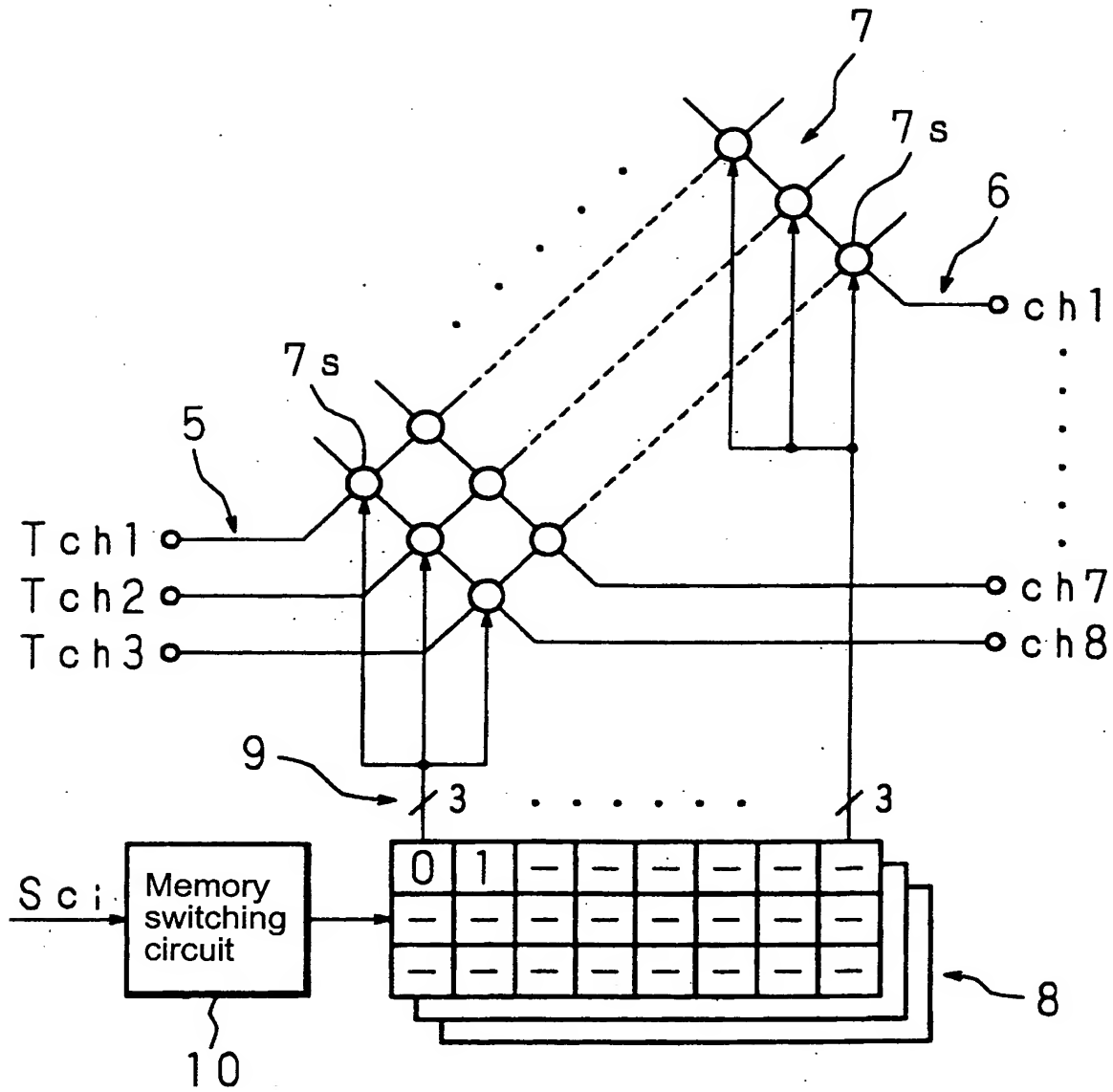


Fig.6

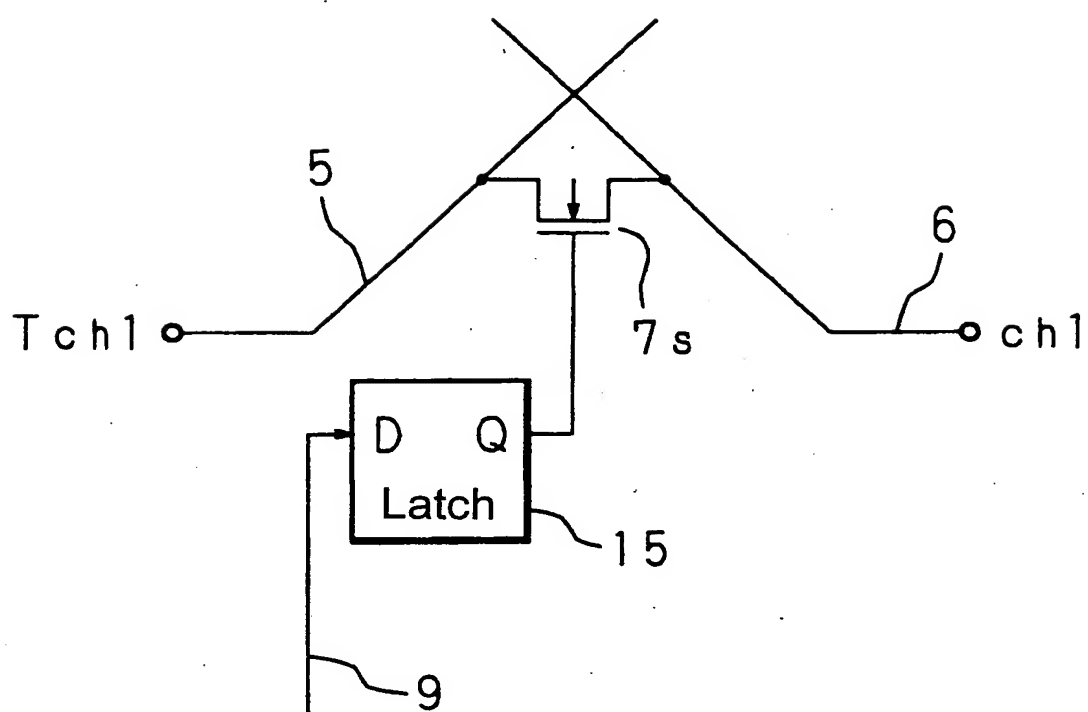
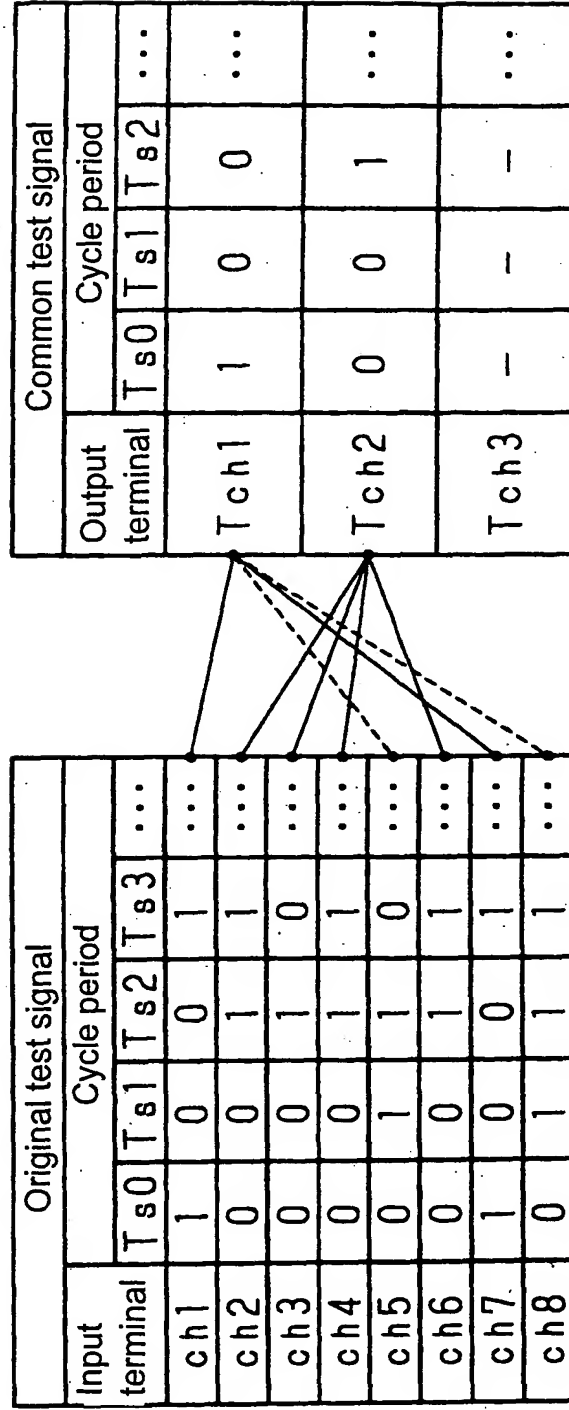


Fig.7



----- : For inverted signals

Fig.8

ch: Input terminal CH: Inverted input terminal

Cycle	Grouping state (n: Group number, N: Common target terminal number=6)				n
Ts0	Gr1		Gr0		2
	ch1,7, CH2,3,4,5,6,8		ch2,3,4,5,6,8, CH1,7		
Ts1	Gr10		Gr00		4
	ch1,7, CH5,8		ch2,3,4,6 ch5,8,CH1,7		
Ts2	Gr100	Gr101	Gr110	Gr000	Gr010
	ch1,7	ϕ	ϕ	ch2,3,4,6	ch5,8 ϕ
	CH5,8	CH2,3,4,6		CH1,7	
Ts3	Gr1001	Gr1000	Gr1101	Gr0011	Gr0110
	ch1,7			ch2,4,6	ch3 ch5 CH1,7
	CH5	CH8	CH3	CH2,4,6	ch8 8

ϕ : Null set

Grouping information provided in cycle period Ts2 immediately before cycle period Ts3 in which group number n exceeds common target terminal number N=6.
 Gr100 (ch1, ch7, CH5, CH8) equivalent to Gr011 (ch5, ch8, CH1, CH7) for Tch1
 Gr110 (CH2, CH3, CH4, CH6) equivalent to Gr001 (ch2, ch3, ch4, ch6) for Tch2

Fig.9

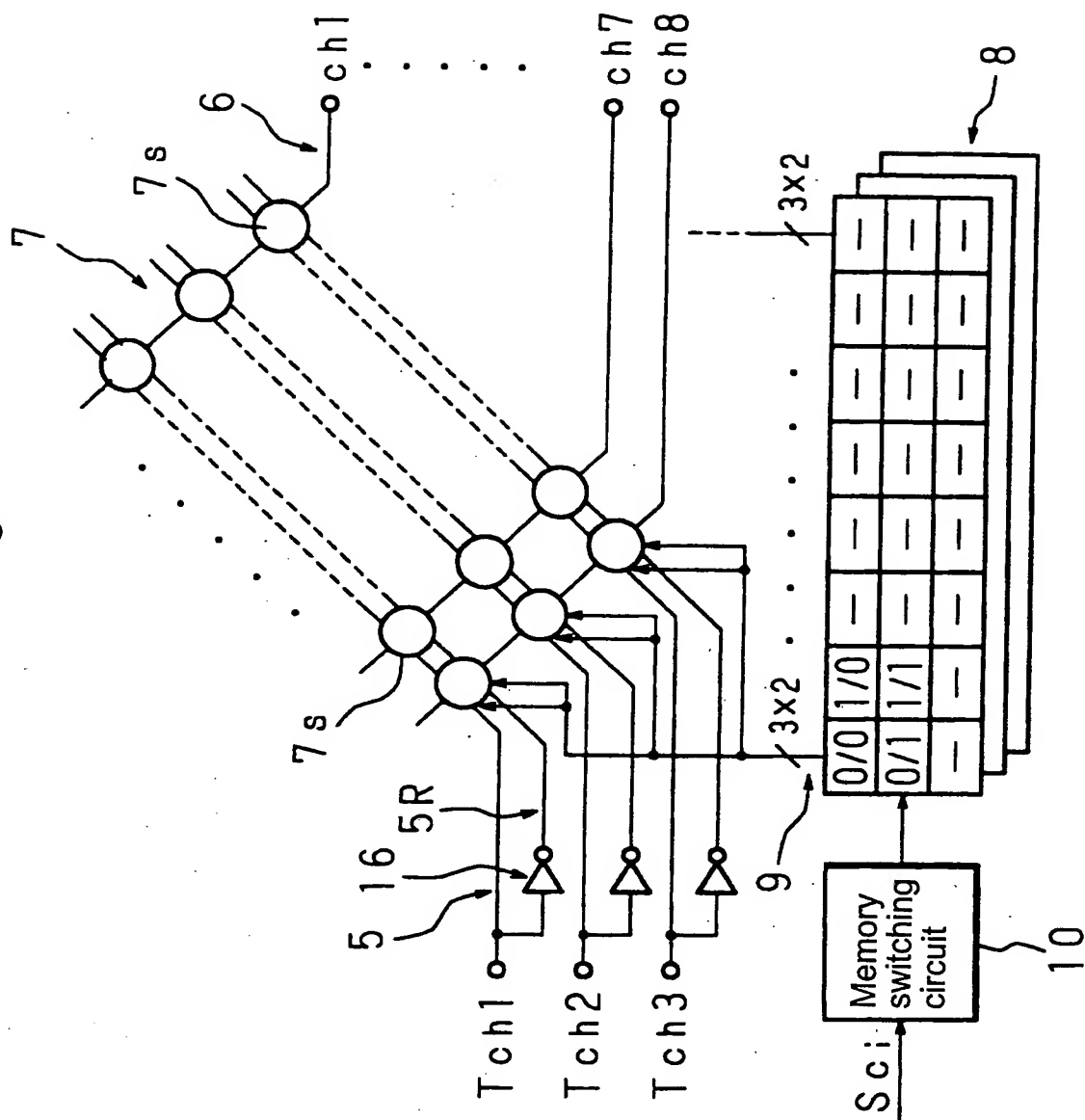


Fig. 10

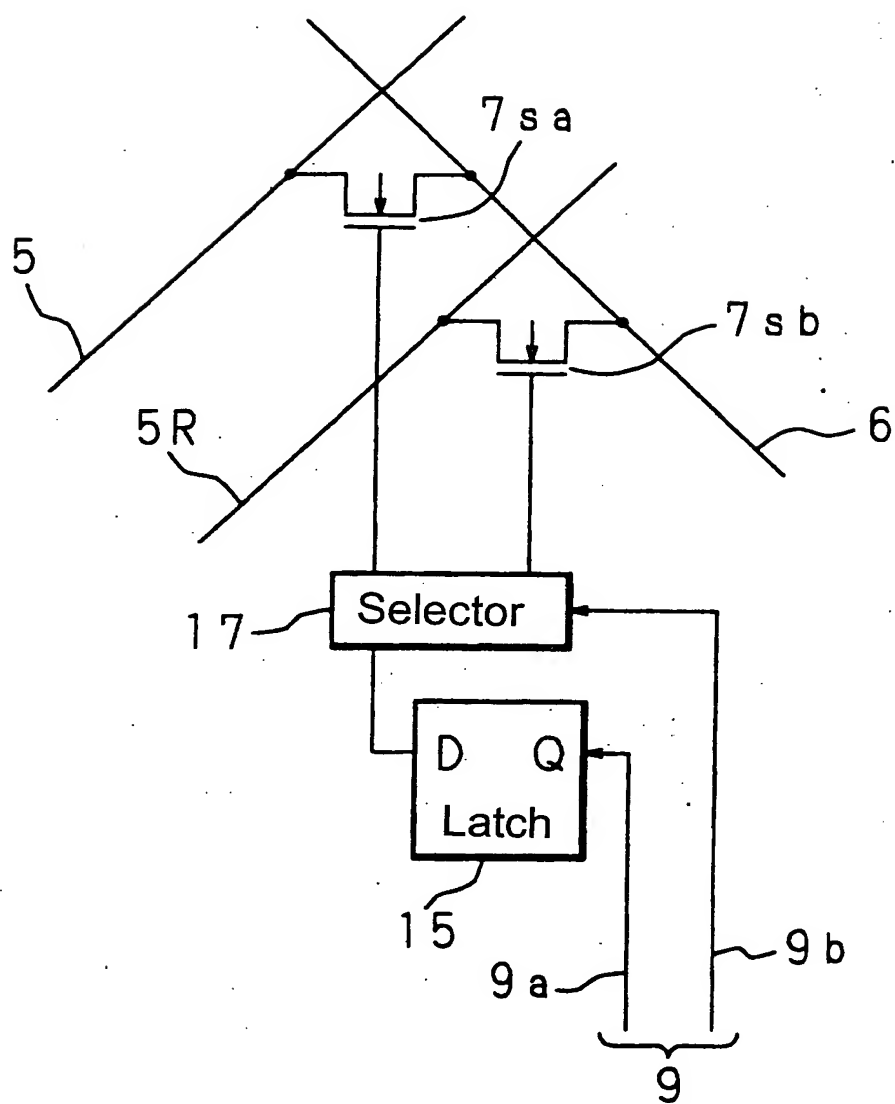


Fig.11

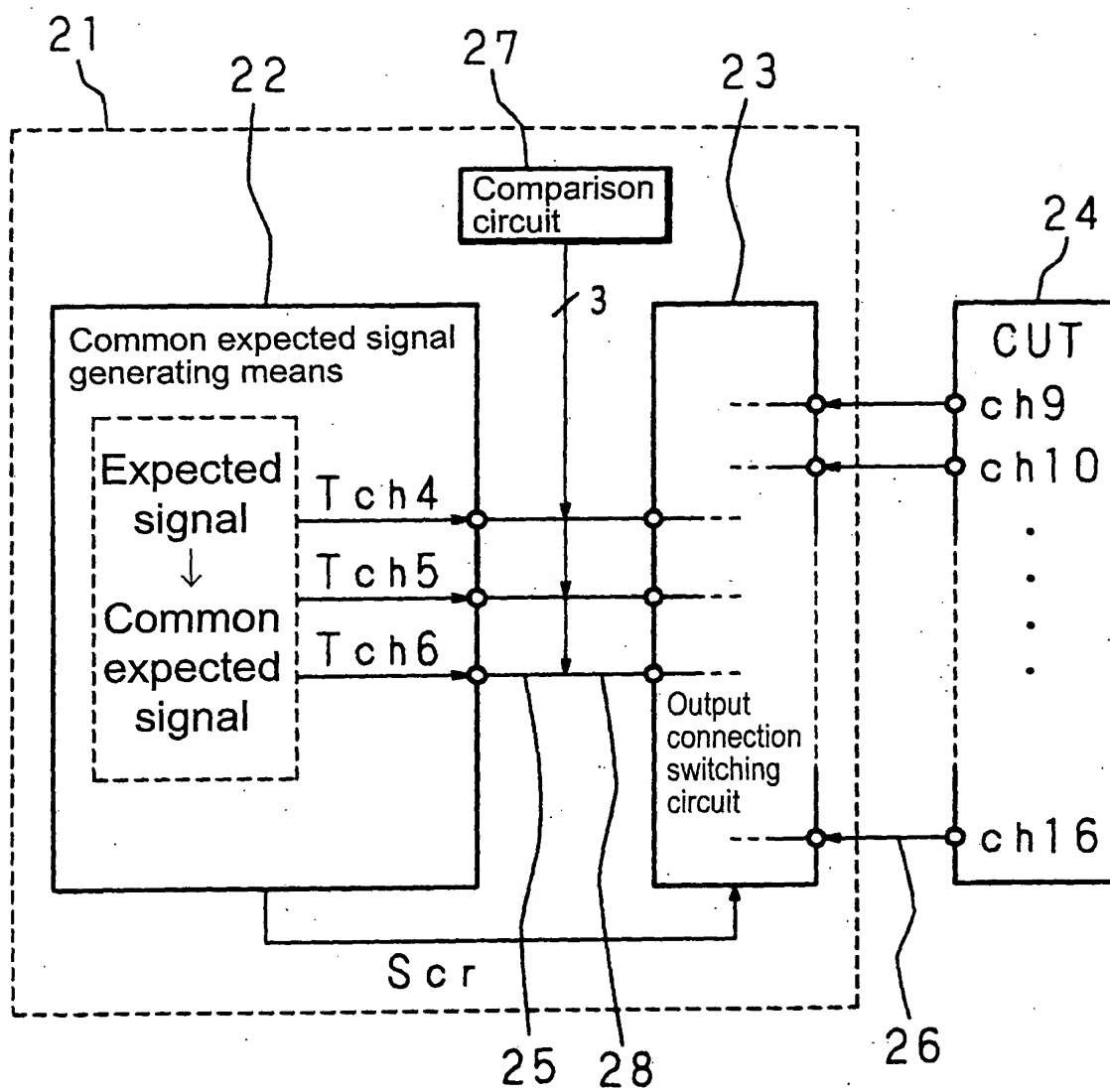


Fig.12

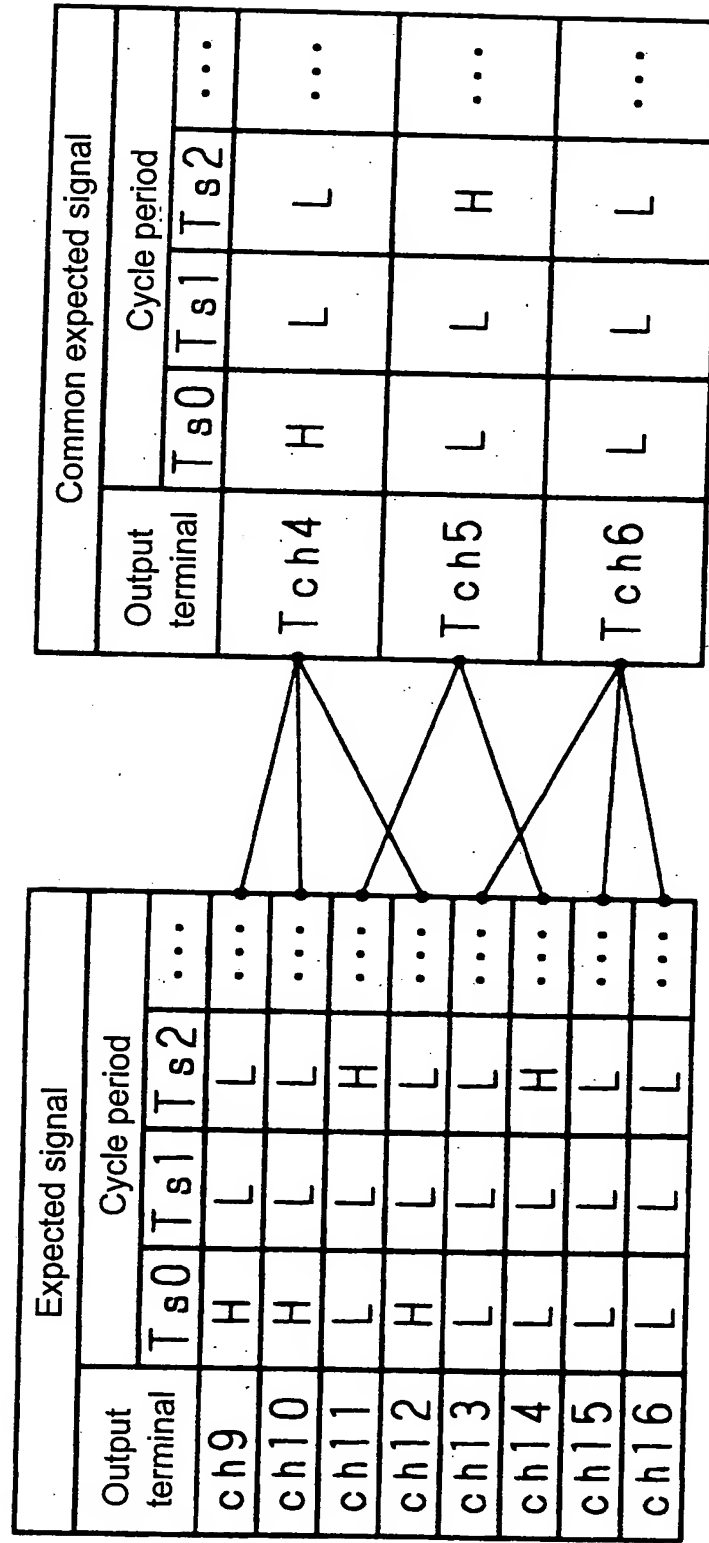


Fig.13

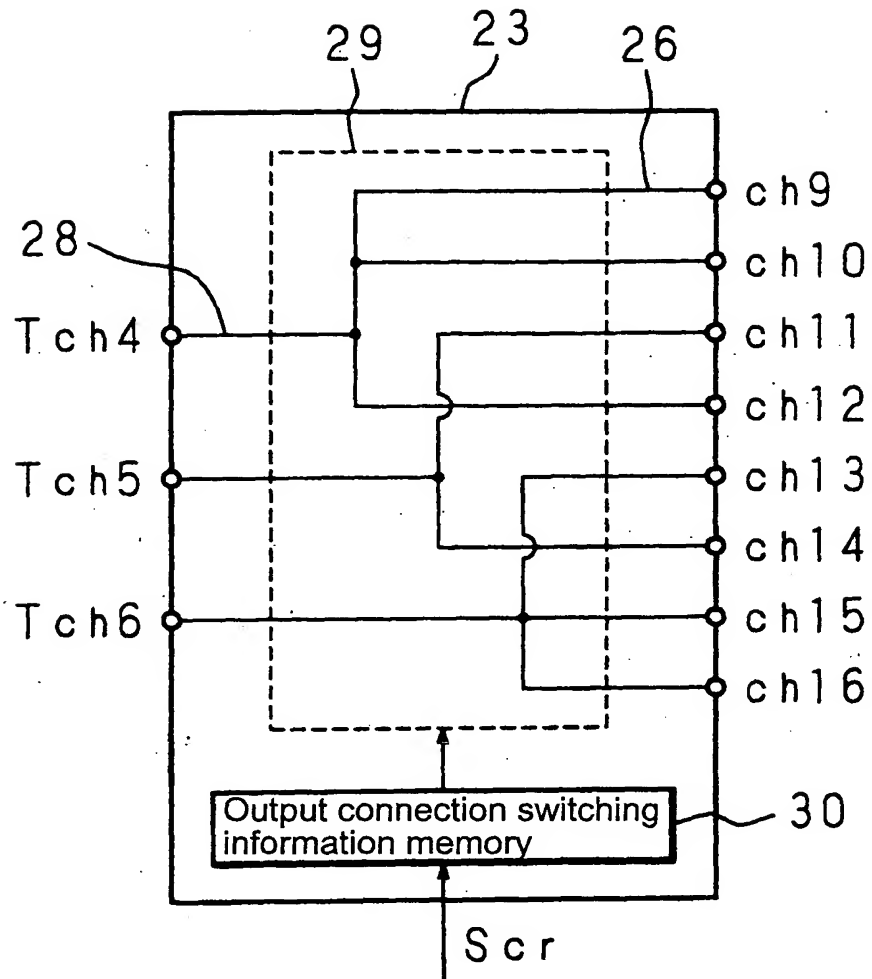


Fig.14

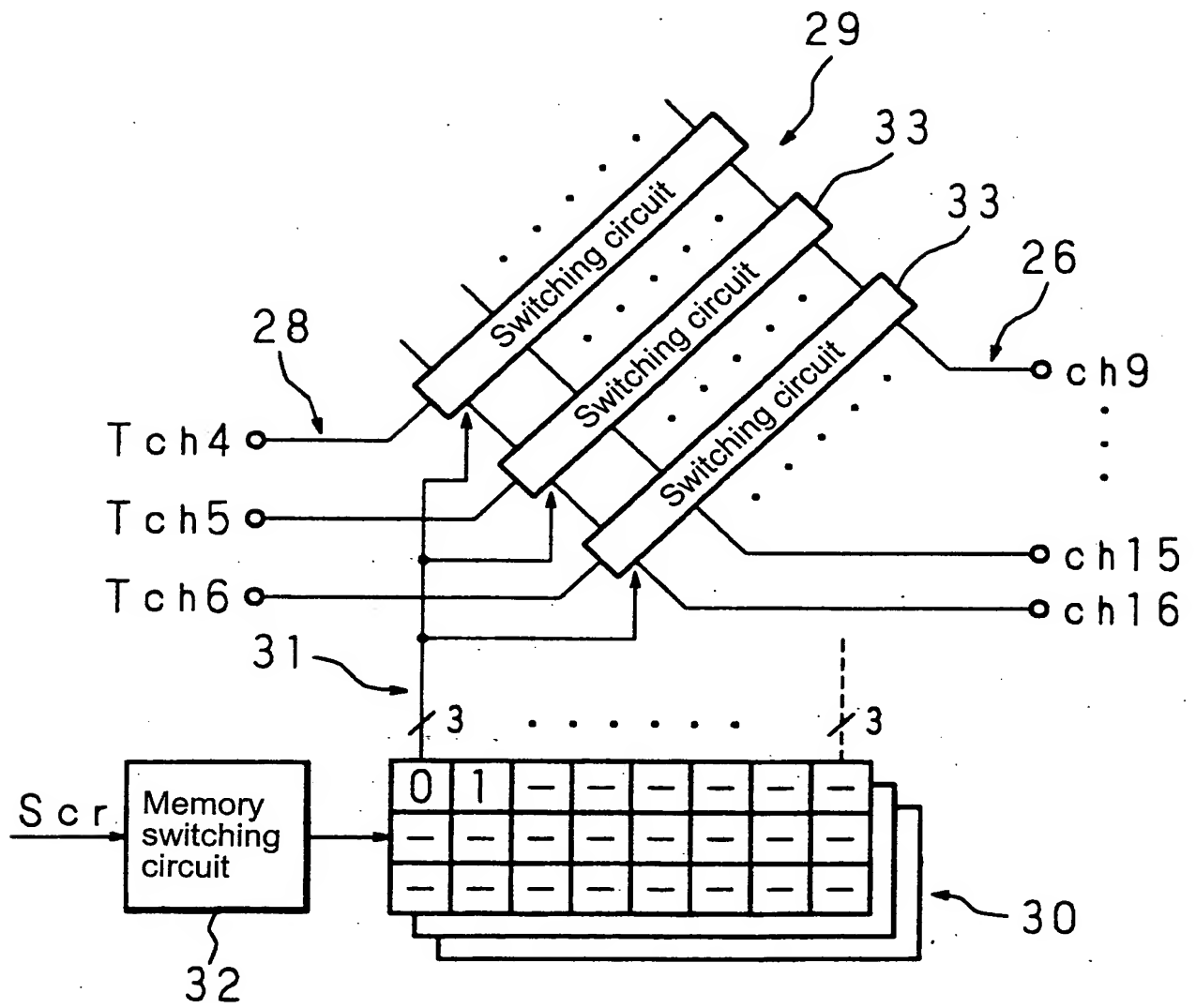


Fig. 15

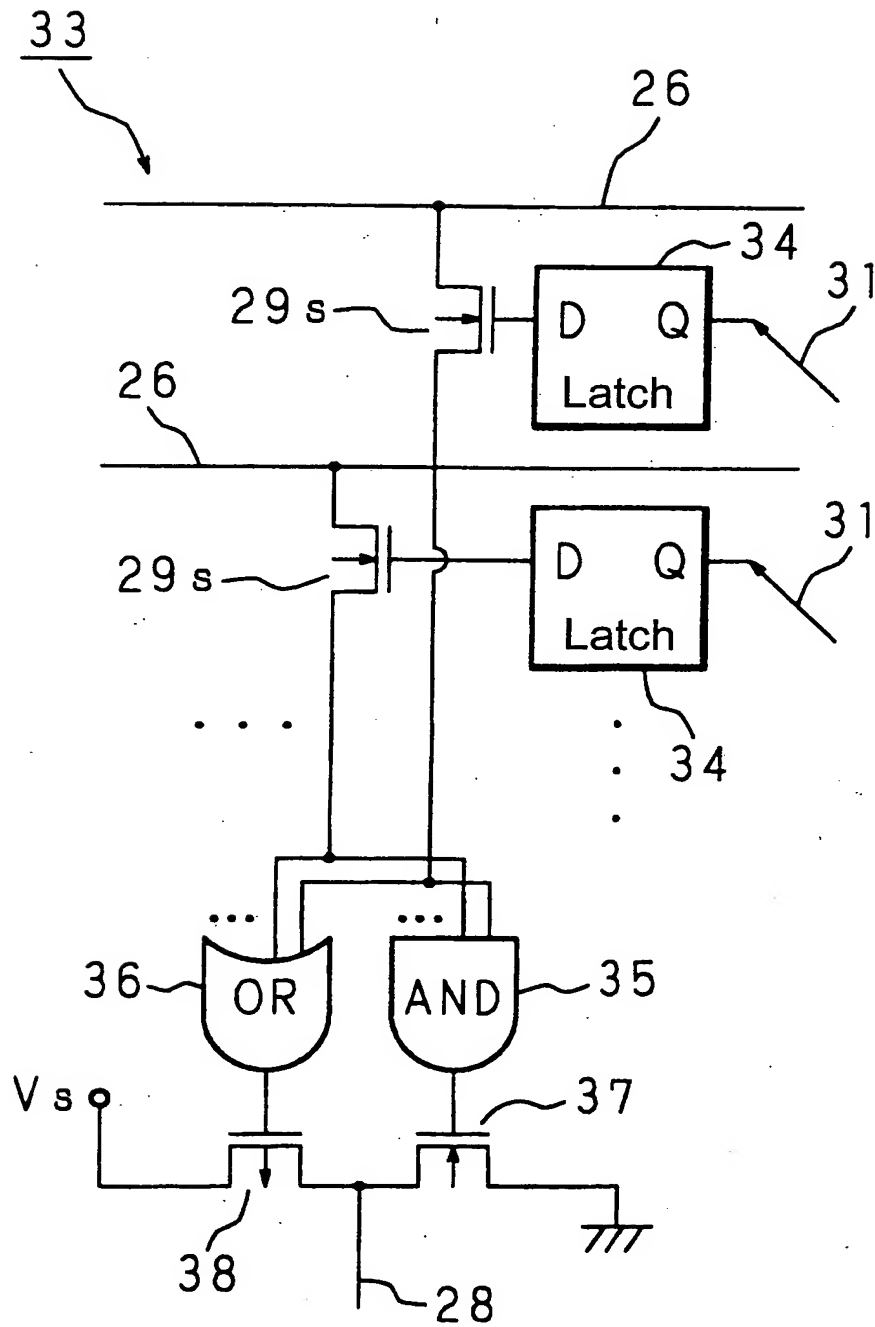


Fig. 16

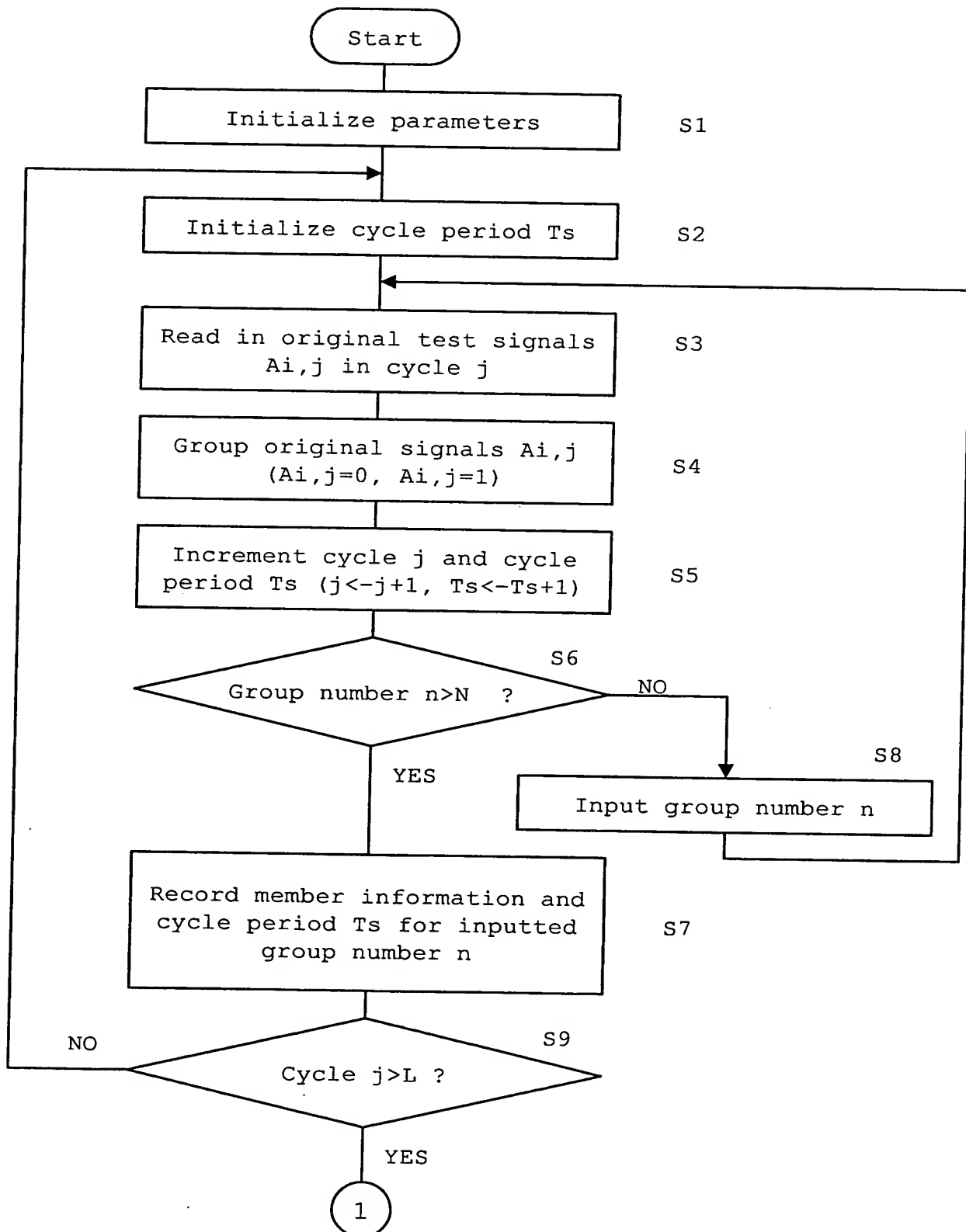


Fig. 17

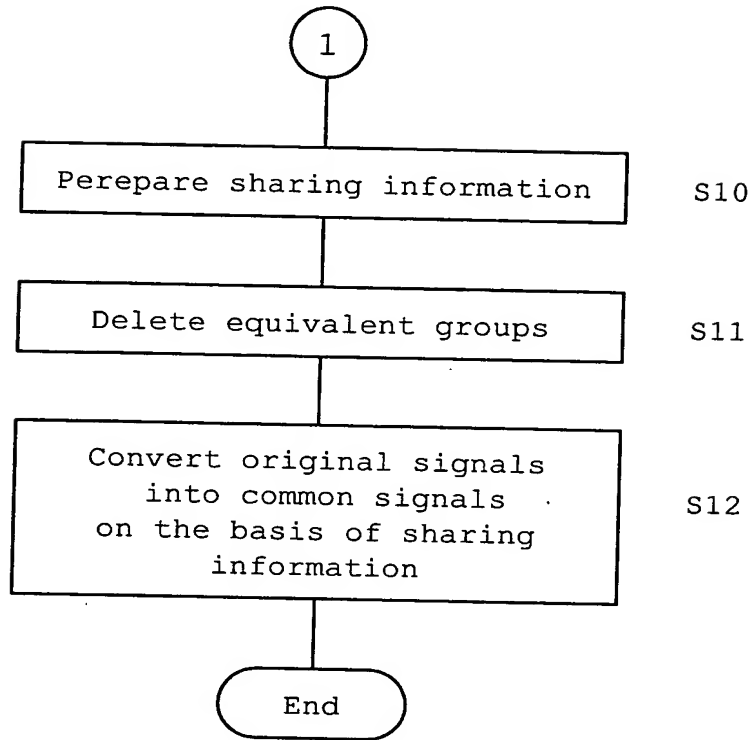
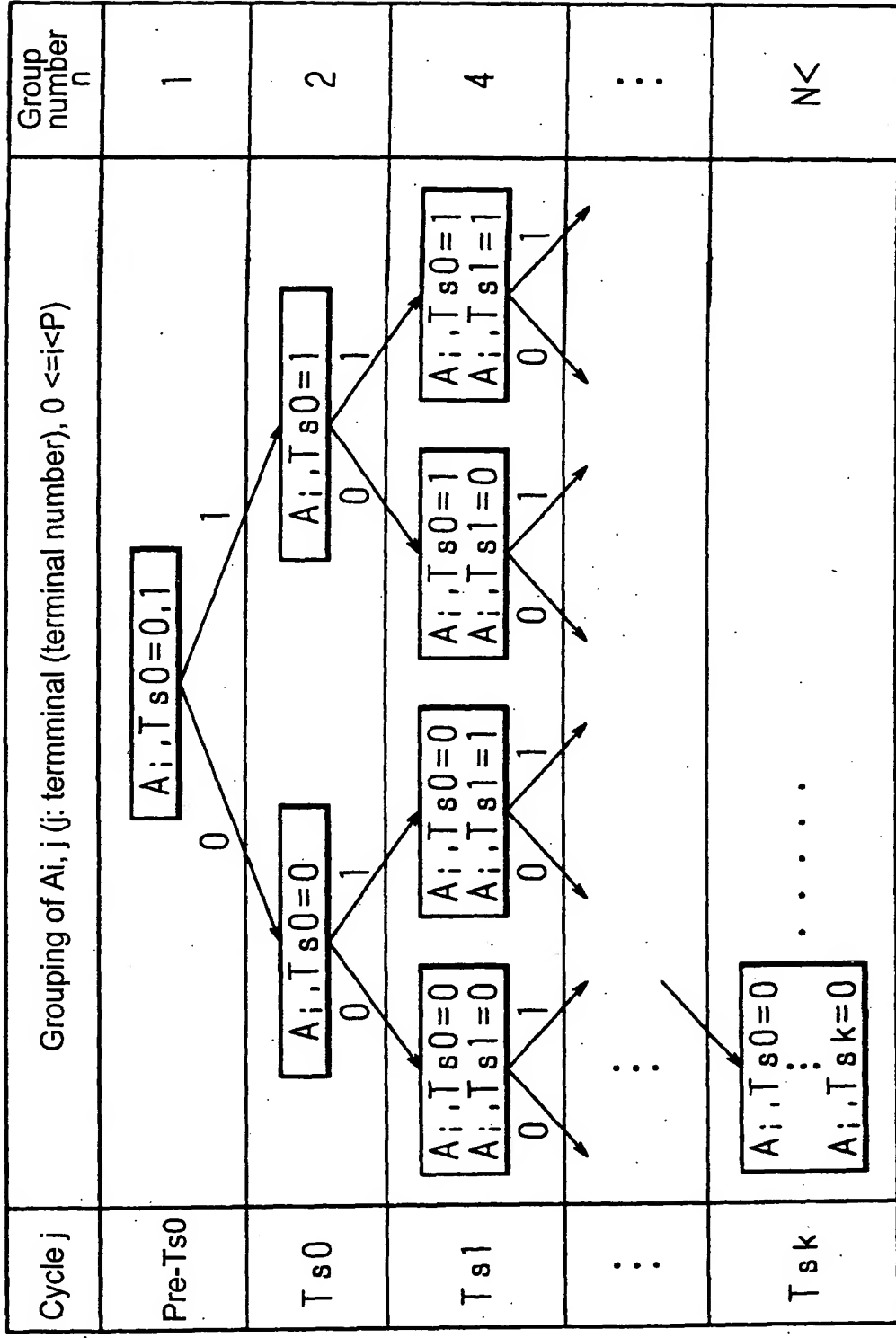


Fig.18



P: Original terminal number N: Common target terminal number

Fig.19 PRIOR ART

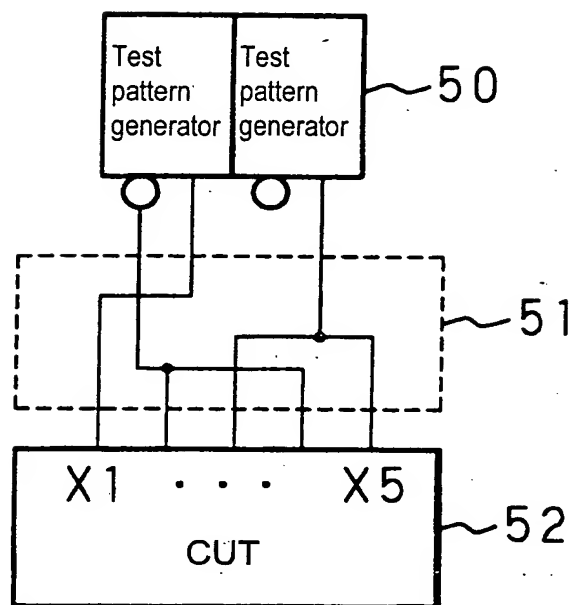


Fig.20 PRIOR ART

